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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

AHMED, SHEEBA

ART UNIT

PAPER NUMBER

1773

DATE MAILED: 10/04/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/819,816

Applicant(s)

ARAI ET AL.

Examiner

Sheeba Ahmed

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 12-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1. 6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-11 in Paper No. 5 is acknowledged. Accordingly, claims 12-18 are withdrawn from consideration.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

2. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Murata et al. (US 6,074,741).

Murata et al. disclose an antiglare material (***corresponding to the antiglare film of the claimed invention***) comprising a transparent substrate (***corresponding to the transparent support of the claimed invention***) provided with a surface layer (***corresponding to the antiglare layer of the claimed invention***) on one or both sides and is formed from a UV curing resin containing at least an epoxy compound and beads of resin (***corresponding to the resin and particles of the claimed invention***) having a particle size of 0.5 to 6 microns (***thus meeting the limitations of claim 3***) (Column 3,

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lines 1-10). The resin beads may be formed of crosslinked acrylic resin wherein methyl methacrylate is preferred (***corresponding to the polymethyl methacrylate or crosslinked acrylic resin particles of claim 5***) (Column 7, lines 33-43). The thickness of the surface layer is 1 to 5 microns (Column 8, lines 36-38). With regards to the limitations that the antiglare layer is subjected to a rubbing treatment, the Examiner takes the position that the determination of patentability for product claims containing process limitations is based on the product itself and not on the method of production. If the product is the same as a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985) and also see MPEP 2113. In this case, the product (i.e., the antiglare film) is the same despite the process limitation of subjecting it to a rubbing treatment given that the rubbing treatment does not result in a change in structure or composition of the antiglare film. All limitations of the claimed invention are disclosed in the above reference.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 8-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshida et al. (WO97/30021).

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Yoshida et al. disclose fluorine-containing polyfunctional methacrylates **(corresponding to the fluorine-containing compound of the low refractive index layer of claim 11)** composition that can be used for preparing a low refractivity material for a reflection reducing film. The reflection reducing film **(corresponding to the antiglare film of the claimed invention)** is composed of a transparent substrate **(corresponding to the transparent support layer of the claimed invention)**, a layer of low refractivity material having a refractive index of 1.35 to 1.49 **(corresponding to the low refractive index layer of claim 8 and meeting the refractive index limitations of claim 8)** and a material layer there between having a refractive index of 1.55 or higher **(corresponding to the antiglare layer of the claimed invention and meeting the refractive index limitation of claim 10)**. With regards to the limitation that the fluorine-containing compound has a dynamic friction coefficient of 0.03 to 0.15 and a contact angle to water of 90 to 120°, the Examiner takes the position that such material properties are inherently met by the fluorine-containing polyfunctional methacrylate disclosed by Yoshida given that chemical structure of fluorine-containing compound of the claimed invention and that disclosed by Yoshida are identical. Furthermore, with regards to the limitations that the antiglare layer is subjected to a rubbing treatment, the Examiner takes the position that the determination of patentability for product claims containing process limitations is based on the product itself and not on the method of production. If the product is the same as a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985) and also see MPEP 2113. In this case,

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the product (i.e., the antiglare film) is the same despite the process limitation of subjecting it to a rubbing treatment given that the rubbing treatment does not result in a change in structure or composition of the antiglare film. All limitations of the claimed invention are inherent or disclosed in the above reference.

4. Claims 1, 2, 5, and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al. (US 6,033,743).

Suzuki et al. disclose an antireflection film (***corresponding to the antiglare film of the claimed invention***) comprising a transparent substrate (***corresponding to support of the claimed invention***) and at least one resin layer (***corresponding to the antiglare layer of the claimed invention***) comprising a resin composition containing ultrafine particles (***corresponding to the ultrafine particles of claim 7***) and a polyfunctional acrylate having three or more acryloyl groups (***corresponding to the monomer having two or more unsaturated groups as recited in claim 7***) (Column 1, lines 60-68 and Column 4, lines 35-43). Examples of the ultrafine particles include ITO and oxides of Zn, Sn and Ti (***thus meeting the limitations of claim 7***) (Column 6, lines 50-63). With regards to the limitations that the antiglare layer is subjected to a rubbing treatment, the Examiner takes the position that the determination of patentability for product claims containing process limitations is based on the product itself and not on the method of production. If the product is the same as a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985) and also see

MPEP 2113. In this case, the product (i.e., the antiglare film) is the same despite the process limitation of subjecting it to a rubbing treatment given that the rubbing treatment does not result in a change in structure or composition of the antiglare film. All limitations of the claimed invention are disclosed in the above reference.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murata et al. (US 6,074,741) in view of JP 03184072.

Murata et al. disclose an antiglare material comprising a transparent substrate provided with a surface layer on one or both sides and is formed from a UV curing resin containing at least an epoxy compound and beads of resin having a particle size of 0.5 to 6 microns, as discussed above in paragraph No. 2.

Murata et al. do not disclose that the binder is a cured product of a high refractive index monomer and a monomer with two unsaturated groups.

However, JP 03184072 discloses an antireflection film comprising a layer of a high refractive index monomer such as vinyl naphthalene and having a high ray transmittance, a good yield at the time of production and long-term stability.

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Accordingly, it would have been obvious to one having ordinary skill in the art to add a high refractive index monomer such as vinyl naphthalene (*which inherently has a refractive index between 1.57 and 2.0*) to the antiglare layer of Murata et al. given that JP 03184072 specifically teaches that doing so provides a film with a high ray transmittance, a good yield at the time of production and long term stability.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (US 6,033,743) in view of JP 03184072.

Suzuki et al. disclose an antireflection film comprising a transparent substrate and at least one resin layer comprising a resin composition containing ultrafine particles and a polyfunctional acrylate having three or more acryloyl groups (Column 1, lines 60-68 and Column 4, lines 35-43). Examples of the ultrafine particles include ITO and oxides of Zn, Sn and Ti (Column 6, lines 50-63).

Suzuki et al. do not disclose that the binder is a cured product of a high refractive index monomer and a monomer with two unsaturated groups.

However, JP 03184072 discloses an antireflection film comprising a layer of a high refractive index monomer such as vinyl naphthalene and having a high ray transmittance, a good yield at the time of production and long-term stability.

Accordingly, it would have been obvious to one having ordinary skill in the art to add a high refractive index monomer such as vinyl naphthalene (*which inherently has a refractive index between 1.57 and 2.0*) to the antiglare layer of Suzuki et al. given that

JP 03184072 specifically teaches that doing so provides a film with a high ray transmittance, a good yield at the time of production and long term stability.


Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheeba Ahmed whose telephone number is (703)305-0594. The examiner can normally be reached on Mon-Fri 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on (703)308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-5408 for regular communications and (703)305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-5665.


Sheeba Ahmed
September 29, 2002


Paul Thibodeau
Supervisory Patent Examiner
Technology Center 1700